



Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE
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EPIDEMIOLOGIC NOTES AND REPORTS
CARBON MONOXIDE POISONING - Mississippi

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The current energy crisis may be accompanied by an increase in carbon monoxide poisoning. Fuel shortages will spawn the use of various devices for providing additional heat in homes. Fireplaces and other heating facilities which have not been used recently may be placed into operation. Catalytic heaters, charcoal-burning units, and similar devices may be used indoors or in confined spaces. Many individuals will undoubtedly make "makeshift" measures to prevent the loss of heat from their homes, including installing additional insulation, sealing cracks and crevices, covering windows with plastic, and using other measures which tend to make the home "airtight". Any measure that reduces the amount of air movement into a home, coupled with a defective heating device or the improper use of a combustible fuel indoors enhances the potential for poisoning by carbon monoxide. Health officials are urged to work with private organizations, industry, and the news media in publicizing the carbon monoxide hazards associated with improper heating devices, as illustrated by the accompanying report from Mississippi.

On the evening of September 7, 1973, a family of 7 from Hinds County, Mississippi, began to experience lassitude, headaches, and malaise. Their symptoms abated during the next day but returned that night; several of the children had nausea and vomiting. The following day the symptoms again disappeared, but they recurred that evening.

On September 10, 2 of the family consulted a private physician. He noted that they had fever (101°-102° F) and prescribed symptomatic treatment for their malaise, nausea, and vomiting.

The next evening the entire family again had headaches, malaise, and intermittent nausea and vomiting followed by dizziness and syncope, and the next morning they all stayed home. Later that day they were found unconscious by a relative and were taken by ambulance to a nearby hospital.

In the emergency room all family members were found to be stuporous and febrile, and several of the children had flushed skin color. Two family members were given oxygen nasally. All had normal chest X-rays. The diagnosis of carbon monoxide poisoning was made, and all 7 were admitted to the hospital for observation; the following morning they had completely recovered and were discharged. Blood specimens obtained in the emergency room from the 7 family members and tested for carboxyhemoglobin levels by the Toxicology Department, University of Mississippi Medical Center, all showed elevated levels.

Representatives from the Hinds County Health Department and a local utility company visited the home of the affected family and found a leaking hot water faucet and an improperly vented gas hot water heater. The leaking faucet was thought to have caused the hot water heater to operate continually. Carbon monoxide levels in the house were measured and were markedly elevated (0.1 volume percent or 1,000 ppm).

(Reported by Dan J. Mitchell, M.D., private physician, Jackson; Robert B. Ireland, M.D., private physician, Clinton;

Arthur Hume, M.D., Assistant Professor of Pharmacology and Toxicology, University of Mississippi Medical Center; Eric McVey, M.D., Director, Hinds County Health Department; Durward L. Blakey, M.D., State Epidemiologist, Mississippi State Board of Health; and an EIS Officer.)

Editorial Note

The fact that carbon monoxide poisoning can produce fever, leukocytosis, and an abnormal urinary sediment is not generally appreciated. In this instance, the diagnosis of carbon monoxide poisoning was not considered initially when several family members presented with gastrointestinal complaints and fever but was made only after mental changes had occurred several days later and several of the children were noted to have a slightly flushed appearance.

The source of carbon monoxide in the household was thought to be fumes produced from combustion of natural gas in an improperly vented water heater, not fumes from leaking unburned natural gas. In the United States, natural gas does not contain carbon monoxide (1).

Reference

1. Finck PA: Exposure to carbon monoxide. Review of the literature and 567 autopsies. *Milit Med* 131:1513-1539, 1966

CONTENTS

Epidemiologic Notes and Reports	
Carbon Monoxide Poisoning - Mississippi	1
Type B Botulism - Alaska	2
Wild Mushroom Poisoning - California	4
Toxic Peripheral Polyneuropathy - Ohio	9
Influenza - Sweden, United States	10
Turtle-Associated Salmonellosis - Washington	10
Current Trends	
Zoster Immune Globulin - United States	2
Recall of Commercially Canned Mushrooms - United States	12
International Notes	
Cholera - Worldwide	9

EPIDEMIOLOGIC NOTES AND REPORTS
TYPE B BOTULISM – Alaska

Between November 25 and 28, 1973, 9 cases of botulism occurred in the Alaskan Eskimo village of Chefnak (population 150) near the Bering Sea, 70 miles west of Bethel. There were no deaths. The epidemiologic investigation of the outbreak is summarized below.

On December 4, 1973, a 33-year-old woman from Chefnak in her eighth month of pregnancy was admitted to the Bethel Public Health Service Hospital with a 4-day history of purulent pharyngitis. Within a short time after her admission she had developed mydriasis, ptosis, weakness of lateral gaze, stridor, dysphagia, and dry mucous membranes. Botulism was suspected; trivalent (ABE) botulism antitoxin was administered after serum and stool specimens were obtained for diagnostic tests. The patient was flown to the Alaska Native Medical Center in Anchorage for further treatment.

Two other residents of Chefnak were flown to Bethel on December 5 for treatment of a syndrome including mydriasis, diplopia, xerostomia, and constipation. They reported that they and several others in the village who had shared some food approximately 10 days earlier had become ill within approximately 24 to 48 hours after eating. An epidemiologic investigation in Chefnak begun on December 6 uncovered 6 additional residents of the village with a history of recent diplopia, xerostomia, and dysphagia; 2 had continuing mydriasis.

All 5 persons with persisting signs of botulism at the time of diagnosis were hospitalized and treated with trivalent botulism antitoxin. None required artificial ventilatory support, and all recovered uneventfully.

Mouse inoculation tests were performed at the Arctic Health Research Center in Fairbanks and at CDC. They revealed type B botulinal toxin in serum specimens from each of the hospitalized patients; stool specimens from 3 hospitalized patients were also positive for type B toxin.

The customary diet of the villagers includes seal meat, walrus, salmon, whitefish, herring, cod, needlefish, and blackfish. Most of the fish is caught in the summer and dried for frozen storage during the winter in a food cache. Eight of the 9 ill persons had eaten dried whitefish between November 25 and 28 from the cache belonging to the couple hospitalized on December 5. All denied eating home-canned foods. None

of 8 other villagers who had eaten at the same household during the same period, but who denied having eaten whitefish, developed symptoms of botulism.

Review of the contents of the suspect food cache revealed that the food had not all been thoroughly dried before storage and that some spoilage had occurred. Samples of remaining whitefish and other food were obtained for botulinal toxin assay, but no toxin was detected.

(Reported by Martha Lewis, Village Health Aide, Chefnak; Keith Brownsberger, M.D., private physician, Anchorage; William Harley, M.D., Alaska Native Medical Center, Anchorage; Lawrence Miller, Arctic Health Research Center, Fairbanks; Robert Hurwitz, M.D., David Andrews, M.D., Woodward Cannon, M.D., U.S. PHS Hospital, Bethel, Alaska; Jorene Hout, P.H.N., Alaska Division of Public Health, Bethel; Elizabeth Tower, M.D., Regional Health Officer, Donald K. Freedman, M.D., M.P.H., Director, Alaska Division of Public Health, Juneau; the Enterobacteriology Section, Bacteriology Branch, Bureau of Laboratories, CDC; and 3 EIS Officers.)

Editorial Note

This is the first reported outbreak of type B botulism in Alaska; all others in which the toxin was identified were caused by type E (1). Epidemiologic evidence suggests that whitefish was the vehicle. Type B spores probably germinated in the damp, spoiling fish in the cache and produced botulinal toxin. The extraordinary mildness of the symptomatology in this outbreak may have been due to a low level of toxin in the contaminated food or to an inherently low toxicity of type B toxin. In addition, the case definition used in the investigation included patients with a history of minimal illness and with no objective signs of botulism. Whereas virtually all type E botulism in the United States has been due to contaminated fish, the converse is not true; botulism outbreaks in which fish was implicated as the responsible vehicle have been due to type A and type B strains as well as to type E (1).

Reference

1. U.S. Department of Health, Education, and Welfare, Public Health Service: Botulism in the United States: Review of Cases 1899-1969 and Handbook for Epidemiologists, Clinicians, and Laboratory Workers, [1970]

CURRENT TRENDS

ZOSTER IMMUNE GLOBULIN – United States

Zoster immune globulin (ZIG) is again available for distribution through CDC's ZIG program. Patients eligible for ZIG prophylaxis are children with predisposing high-risk conditions (leukemia or lymphoma, an immunodeficiency syndrome, or treatment with immunosuppressive medications) who have been exposed to an active case of varicella within the preceding 72 hours. Adults, children with already established varicella-zoster infection, and children with a previous history of varicella-zoster infection are not eligible for ZIG prophylaxis.

ZIG will be distributed according to the following dosage schedule:

Weight (kilograms)	Dose (ml)	No. of Vials	Weight (kilograms)	Dose (ml)	No. of Vials
0-10	1.25	1	20-30	3.75	3
10-20	2.50	2	Over 30	5.00	4

The maximum dose will remain 5 ml; ZIG is administered intramuscularly.

Because ZIG is an investigational preparation, physicians caring for children who receive it are requested to obtain serum samples before ZIG administration, 48 hours after administration, and 4 weeks after administration and to supply to CDC clinical follow-up data for 30 days after treatment.

Physicians caring for children who have been exposed to varicella and who meet the above criteria should contact CDC or one of the regional ZIG consultants (Table 1). Information regarding plasma donation to the ZIG program may be obtained from the Immunization Branch, CDC.

(Reported by the Immunization Branch, Bureau of State Services, CDC.)

Table 1
ZIG Regional Consultants and Alternates

Region	Consultant	Alternate
New England	Adolf W. Karchmer, M.D. Infectious Disease Unit Mass Gen. Hosp. Boston, Mass. 02114 Office: (617) 726-3812 Home: (617) 237-3646	Martin S. Hirsch, M.D. Office: (617) 726-3812 Home: (617) 864-8030
Mid-Atlantic	Philip A. Brunell, M.D. Ann Gershon, M.D. N.Y. Univ. Med. Ctr. N.Y., N.Y. 10016 Office: (212) 561-5259 Home: (212) 369-5126 (Dr. Gershon)	Anthony Brickman, M.D. Office: (212) 561-5259 Home: (212) 677-8706
Mideast	Richard G. Judelsohn, M.D. Private Practice of Pediatrics Buffalo, N.Y. 14209 Office: (716) 884-8018 Home: (716) 688-5579	
Southeast & National	Robert L. Rosenberg, M.D. Joel D. Meyers, M.D. A. David Brandling-Bennett, M.D. CDC, Atlanta, Ga. 30333 Office: (404) 633-3311, ext. 3736 Night: (404) 633-2176 Home: (404) 378-0379 (Dr. Rosenberg) (404) 237-3204 (Dr. Meyers) (404) 636-5277 (Dr. Bennett)	John F. Modlin, M.D. Office: (404) 633-3311, ext. 3736 Home: (404) 325-4319 J. Lyle Conrad, M.D. Office: (404) 633-3311, ext. 3743 Home: (404) 636-3902
Midwest	Richard Hong, M.D. Univ. of Wis. Med. Ctr. Madison, Wis. 53706 Office: (608) 262-6954 Home: (608) 836-8189	Shin-Wen Huang, M.D. Office: (608) 262-6954 Home: (608) 238-2497 Robert Levy, M.D. Office: (608) 262-6954 Home: (608) 271-7787
Mountain	Kenneth McIntosh, M.D. Dept. of Pediatrics Univ. of Colo. Sch. of Med. Denver, Colo. 80220 Office: (303) 394-8501 Home: (303) 388-0538	C. Henry Kempe, M.D. Office: (303) 394-8371 Home: (303) 322-4457
Pacific	Moses Grossman, M.D. Univ. of Calif. Service San Francisco Gen. Hosp. San Francisco, Calif. 94110 Office: (415) 648-8200, ext. 441 Home: (415) 681-0475	Delmer Pascoe, M.D. Office: (415) 648-8200, ext. 441 Home: (415) 562-3242

EPIDEMIOLOGIC NOTES AND REPORTS
WILD MUSHROOM POISONING — California

In November 1973, 2 20-year-old men from San Mateo County, California, became ill with severe nausea, vomiting, diarrhea, weakness, and malaise 12 hours after eating fried mushrooms that they had picked in the hills near La Honda.

They received Compazine* and Lomotil*, and 1 man recovered 3 days later. The other was hospitalized on the fourth day of his illness with jaundice, hematemesis, and seizures. He lapsed into a coma the following day and died of toxin-induced massive hepatic necrosis despite vigorous supportive treatment. No mushrooms remained for identification; however, the incubation period and symptom complex were characteristic of poisoning by mushrooms of the cyclopeptide group (*Amanita phalloides*, *A. verna*, and certain *Galerina* sp.). *A. phalloides* caused 3 deaths in California in 1972.

(Reported by Peter Rudd, M.D., Medical Resident, Edward Rubenstein, M.D., Attending Physician, Lisa Saarni, Medical Extern, Brian Paaso, M.D., Gastroenterology Fellow, Department of Medicine, Stanford University Medical Center; Ronald R. Roberto, M.D., Medical Epidemiologist, James Chin, M.D.,

*Inclusion of trade names does not imply endorsement by the Public Health Service or the U.S. Department of Health, Education, and Welfare.

State Epidemiologist, California State Department of Health; and an EIS Officer.)

Editorial Note

Symptoms of Group A cyclopeptide poisoning appear 6 to 24 hours after ingestion of mushrooms. Sharp abdominal pains are followed by violent vomiting and persistent, profuse diarrhea, which may be bloody. These symptoms tend to subside, but in 3 to 4 days the patient's condition begins to worsen with symptoms of liver, kidney, and central nervous system failure which may lead to death within a week. The fatality rate is 30% to 50%. There is no specific antidote. The late onset of symptoms makes early treatment of relatively little help. Gastric lavage might prevent further absorption of toxins. Fluid and electrolyte imbalances need to be corrected. SGOT or SGPT levels and prothrombin time should be measured immediately and monitored frequently. Hemodialysis may prove useful. Consideration should be given to treatment with experimental drugs (thioctic acid, cytochrome-C) available only from the Food and Drug Administration (1,2).

References

1. Duffy TJ: Pharmacology of mushroom poisoning. *New Engl J Med* 289:379-380, 1973
2. Puget Sound Mycological Society: Mushroom Poisoning in the Pacific Northwest, September 1972

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	1st WEEK ENDING		MEDIAN 1969-1973	CUMULATIVE, FIRST WEEK		
	January 5, 1974	January 6, 1973		1974	1973	MEDIAN 1969-1973
Aseptic meningitis	36	23	36	36	23	36
Brucellosis	1	1	—	1	1	—
Chickenpox	1,469	2,795	—	1,469	2,795	—
Diphtheria	9	2	2	9	2	2
Encephalitis:						
Primary: Arthropod-borne and unspecified	9	11	11	9	11	11
Post-Infectious	2	1	4	2	1	4
Hepatitis, Viral:						
Type B	102	103	127	102	103	127
Type A	584	745	925	584	745	925
Type unspecified	78			78		
Malaria	3	3	37	3	3	37
Measles (rubeola)	242	356	524	242	356	524
Meningococcal infections, total	25	24	39	25	24	39
Civilian	25	23	37	25	23	37
Military	—	1	2	—	1	2
Mumps	788	1,106	1,624	788	1,106	1,624
Pertussis	8	—	—	8	—	—
Rubella (German measles)	132	135	244	132	135	244
Tetanus	3	—	—	3	—	—
Tuberculosis, new active	374	329	—	374	329	—
Tularemia	3	3	3	3	3	3
Typhoid fever	6	5	5	6	5	5
Typhus, tick-borne (Rky. Mt. spotted fever)	5	—	—	5	—	—
Veneral Diseases:						
Gonorrhea	12,465	10,845	—	12,465	10,845	—
Syphilis, primary and secondary	277	369	—	277	369	—
Rabies in animals	38	32	50	38	32	50

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	—	Poliomyelitis, total:	—
Botulism	—	Paralytic:	—
Congenital rubella syndrome: Mo. 2	2	Psittacosis:	—
Leprosy: Calif. 1	1	Rabies in man:	—
Leptospirosis:	—	Trichinosis: Calif. 2, NYC 1, NY Ups. 1	3
Plague:	—	Typhus, murine:	—

Morbidity and Mortality Weekly Report

**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING JANUARY 5, 1974 AND JANUARY 6, 1973 (1st WEEK)**

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS, VIRAL			MALARIA	
						Primary: Arthropod- borne and Unspecified		Post In- fectious	Type B	Type A	Type Unspecified		
						1974	1973	1974	1974	1974	1974		
UNITED STATES	36	1	1,469	9	9	9	11	2	102	584	78	3	3
NEW ENGLAND	-	-	306	-	-	-	2	-	5	25	11	-	-
Maine *	-	-	10	-	-	-	-	-	-	3	-	-	-
New Hampshire *	-	-	26	-	-	-	-	-	-	3	-	-	-
Vermont	-	-	16	-	-	-	-	-	-	3	-	-	-
Massachusetts	-	-	150	-	-	-	1	-	1	4	11	-	-
Rhode Island	-	-	52	-	-	-	-	-	2	9	-	-	-
Connecticut	-	-	52	-	-	-	1	-	2	3	-	-	-
MIDDLE ATLANTIC	8	-	64	-	-	3	2	-	22	86	8	-	-
Upstate New York	3	-	21	-	-	2	-	-	-	31	-	-	-
New York City	1	-	30	-	-	1	2	-	10	21	-	-	-
New Jersey	3	-	NN	-	-	-	-	-	6	8	5	-	-
Pennsylvania	1	-	13	-	-	-	-	-	6	26	3	-	-
EAST NORTH CENTRAL	3	1	542	-	-	-	1	1	8	105	3	-	-
Ohio	1	-	116	-	-	-	-	-	-	23	-	-	-
Indiana	-	-	4	-	-	-	-	-	-	-	-	-	-
Illinois *	-	-	-	-	-	-	1	1	-	23	-	-	-
Michigan	-	-	161	-	-	-	-	-	7	37	3	-	-
Wisconsin	2	1	261	-	-	-	-	-	1	22	-	-	-
WEST NORTH CENTRAL	8	-	51	-	-	3	2	-	6	12	4	-	-
Minnesota	-	-	1	-	-	-	-	-	1	2	1	-	-
Iowa	-	-	30	-	-	-	2	-	1	3	-	-	-
Missouri	8	-	1	-	-	3	-	-	2	-	3	-	-
North Dakota	-	-	19	-	-	-	-	-	2	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	7	-	-	-
Nebraska	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH ATLANTIC	4	-	156	-	-	1	3	-	5	82	3	-	-
Delaware *	1	-	1	-	-	-	-	-	-	-	-	-	-
Maryland *	1	-	7	-	-	-	1	-	-	3	-	-	-
District of Columbia	-	-	5	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	6	-	-	-	-	-	-	5	3	-	-
West Virginia	-	-	131	-	-	1	-	-	-	3	-	-	-
North Carolina	2	-	NN	-	-	-	1	-	-	17	-	-	-
South Carolina *	-	-	6	-	-	-	-	-	-	7	-	-	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida *	1	-	-	-	-	-	1	-	5	47	-	-	-
EAST SOUTH CENTRAL	2	-	58	-	-	-	-	-	11	56	9	-	-
Kentucky	1	-	43	-	-	-	-	-	8	25	9	-	-
Tennessee	1	-	NN	-	-	-	-	-	3	28	-	-	-
Alabama	-	-	14	-	-	-	-	-	-	2	-	-	-
Mississippi	-	-	1	-	-	-	-	-	-	1	-	-	-
WEST SOUTH CENTRAL	1	-	82	-	-	-	1	-	9	89	10	-	-
Arkansas	-	-	2	-	-	-	-	-	-	4	-	-	-
Louisiana *	1	-	NN	-	-	-	-	-	5	13	10	-	-
Oklahoma	-	-	15	-	-	-	1	-	-	9	-	-	-
Texas *	-	-	65	-	-	-	-	-	4	63	-	-	-
MOUNTAIN	-	-	66	7	7	-	-	-	-	36	2	-	-
Montana	-	-	23	-	-	-	-	-	-	6	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	2	2	-	-
Wyoming	-	-	2	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	17	-	-	-	-	-	-	-	-	-	-
New Mexico	-	-	23	7	7	-	-	-	-	8	-	-	-
Arizona	-	-	-	-	-	-	-	-	-	2	-	-	-
Utah *	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada	-	-	1	-	-	-	-	-	-	18	-	-	-
PACIFIC	10	-	144	2	2	2	-	1	36	93	28	3	3
Washington	-	-	123	2	2	-	-	-	-	1	15	-	-
Oregon	1	-	2	-	-	-	-	-	3	12	4	-	-
California	8	-	-	-	-	2	-	1	33	80	8	3	3
Alaska	-	-	17	-	-	-	-	-	-	-	-	-	-
Hawaii	1	-	2	-	-	-	-	-	-	-	1	-	-
Guam *	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	3	-	-	-	-	-	-	1	15	-	-
Virgin Islands	-	-	-	-	-	-	-	-	-	-	-	-	-

*Delayed reports (1973):
 Aseptic meningitis: Md. 1, Tex. 1
 Chickenpox: Me. 26, N.H. 8, Del. 2,
 Md. 4, Tex. 36
 Diphtheria: La. delete 2, Tex. 1
 Encephalitis, primary: Ill. 1
 Hepatitis B: Md. 1, Fla. 5, La. 1, Tex 7, Utah 2, Guam 2
 Hepatitis A: Me. 2, N.H. 1, Ill. 32, Del. 1, Md. 11
 S. C. delete 1, Fla. 84, La. 2, Tex. 38,
 Utah 13, Guam 1

Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING JANUARY 5, 1974 AND JANUARY 6, 1973 (1st WEEK) - Continued

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1974	Cumulative		1974	Cumulative		1974	Cum. 1974	1974	1974	Cum. 1974	Cum. 1974
		1974	1973		1974	1973						
UNITED STATES	242	242	356	25	25	24	788	788	8	132	132	3
NEW ENGLAND	25	25	132	4	4	3	169	169	-	5	5	-
Maine*	1	1	-	-	-	-	32	32	-	-	-	-
New Hampshire*	10	10	22	1	1	1	36	36	-	1	1	-
Vermont	-	-	-	-	-	-	1	1	-	-	-	-
Massachusetts	4	4	70	-	-	1	33	33	-	2	2	-
Rhode Island	10	10	3	2	2	-	34	34	-	1	1	-
Connecticut	-	-	37	1	1	1	33	33	-	1	1	-
MIDDLE ATLANTIC	83	83	54	3	3	4	40	40	-	8	8	1
Upstate New York	-	-	1	-	-	-	20	20	-	1	1	-
New York City	12	12	36	1	1	2	10	10	-	4	4	-
New Jersey	56	56	16	1	1	1	3	3	-	-	-	1
Pennsylvania	15	15	1	1	1	1	7	7	-	3	3	-
EAST NORTH CENTRAL	71	71	71	3	3	3	186	186	2	44	44	-
Ohio	43	43	1	2	2	3	77	77	-	21	21	-
Indiana	1	1	-	-	-	-	15	15	-	5	5	-
Illinois*	9	9	37	-	-	-	14	14	1	6	6	-
Michigan	11	11	15	1	1	-	47	47	1	8	8	-
Wisconsin	7	7	18	-	-	-	33	33	-	4	4	-
WEST NORTH CENTRAL	4	4	5	-	-	-	25	25	1	1	1	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	1	1	5	-	-	-	9	9	1	-	-	-
Missouri	3	3	-	-	-	-	15	15	-	1	1	-
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	1	1	-	-	-	-
Kansas	-	-	-	-	-	-	-	-	-	-	-	-
SOUTH ATLANTIC	5	5	7	3	3	3	69	69	-	7	7	-
Delaware*	-	-	-	-	-	-	3	3	-	-	-	-
Maryland*	-	-	-	-	-	1	1	1	-	-	-	-
District of Columbia	-	-	-	-	-	-	6	6	-	-	-	-
Virginia	-	-	-	2	2	1	-	-	-	-	-	-
West Virginia*	1	1	3	-	-	-	41	41	-	7	7	-
North Carolina	-	-	2	-	-	1	NN	NN	-	-	-	-
South Carolina	4	4	1	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-
Florida*	-	-	1	1	1	-	18	18	-	-	-	-
EAST SOUTH CENTRAL	2	2	4	1	1	3	109	109	-	8	8	1
Kentucky	2	2	1	-	-	3	22	22	-	3	3	-
Tennessee	-	-	-	1	1	-	69	69	-	2	2	1
Alabama	-	-	-	-	-	-	17	17	-	3	3	-
Mississippi	-	-	3	-	-	-	1	1	-	-	-	-
WEST SOUTH CENTRAL	6	6	31	4	4	3	50	50	2	3	3	-
Arkansas	-	-	1	2	2	-	1	1	-	-	-	-
Louisiana	1	1	-	-	-	-	20	20	-	-	-	-
Oklahoma	-	-	1	1	1	-	7	7	-	3	3	-
Texas*	5	5	29	1	1	3	22	22	2	-	-	-
MOUNTAIN	1	1	6	-	-	2	17	17	-	44	44	-
Montana	-	-	-	-	-	-	1	1	-	40	40	-
Idaho	-	-	1	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	1	1	-	-	-	-	3	3	-	2	2	-
New Mexico	-	-	3	-	-	-	13	13	-	2	2	-
Arizona	-	-	2	-	-	2	-	-	-	-	-	-
Utah*	-	-	-	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC	45	45	46	7	7	3	123	123	3	12	12	1
Washington	-	-	26	1	1	-	22	22	-	4	4	-
Oregon*	-	-	8	1	1	-	56	56	3	1	1	-
California	45	45	10	5	5	3	36	36	-	6	6	1
Alaska	-	-	-	-	-	-	9	9	-	-	-	-
Hawaii	-	-	2	-	-	-	-	-	-	1	1	-
Guam*	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	7	7	20	-	-	-	4	4	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-	-	-	-	-

*Delayed reports (1973): Measles: Me. 2, N.H. 6, Ill. 27
Fla. 1, Tex. 1, Ore. delete 1Mumps: Me. 38, N.H. 1, Ill. 34, Del. 1, Md. 17, W.Va. 120
Fla. 59, Tex. 65, Utah 1, Guam 1

Meningococcal infections: Md. 1, Fla. 1, Tex. 1 Rubella: Me. 2, Ill. 8, Fla. 4, Tex. 2, Utah 2, Guam 2

Morbidity and Mortality Weekly Report

**TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING JANUARY 5, 1974 AND JANUARY 6, 1973 (1st WEEK) — Continued**

AREA	TUBERCULOSIS (New Active)		TULA- REMI A	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES						RABIES IN ANIMALS
	1974	Cum. 1974	Cum. 1974	1974	Cum. 1974	1974	Cum. 1974	GONORRHEA			SYPHILIS (Pri. & Sec.)			Cum. 1974
								1974	Cumulative		1974	Cumulative		
									1974	1973		1974	1974	
UNITED STATES	374	374	3	6	6	5	5	12,465	12,465	10,845	277	277	369	38
NEW ENGLAND	18	18	-	-	-	-	-	261	261	373	7	7	10	-
Maine	-	-	-	-	-	-	-	40	40	21	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	4	4	9	-	-	-	-
Vermont	-	-	-	-	-	-	-	3	3	4	-	-	-	-
Massachusetts	15	15	-	-	-	-	-	111	111	205	2	2	8	-
Rhode Island	3	3	-	-	-	-	-	21	21	59	-	-	1	-
Connecticut	-	-	-	-	-	-	-	82	82	75	5	5	1	-
MIDDLE ATLANTIC	58	58	-	3	3	5	5	1,637	1,637	1,472	51	51	84	1
Upstate New York	-	-	-	-	-	-	-	81	81	447	-	-	-	-
New York City	37	37	-	3	3	-	-	953	953	656	38	38	69	-
New Jersey	21	21	-	-	-	-	-	329	329	161	10	10	9	-
Pennsylvania	-	-	-	-	-	5	5	274	274	208	3	3	6	1
EAST NORTH CENTRAL	44	44	-	-	-	-	-	1,263	1,263	1,479	9	9	19	5
Ohio	-	-	-	-	-	-	-	536	536	661	1	1	3	-
Indiana	4	4	-	-	-	-	-	42	42	96	3	3	5	1
Illinois*	26	26	-	-	-	-	-	228	228	207	3	3	1	1
Michigan	14	14	-	-	-	-	-	342	342	388	2	2	10	-
Wisconsin	-	-	-	-	-	-	-	115	115	127	-	-	-	3
WEST NORTH CENTRAL	9	9	1	-	-	-	-	466	466	777	13	13	-	13
Minnesota	5	5	-	-	-	-	-	168	168	105	1	1	-	1
Iowa	2	2	-	-	-	-	-	2	2	82	-	-	-	5
Missouri	-	-	1	-	-	-	-	90	90	391	10	10	-	-
North Dakota	1	1	-	-	-	-	-	11	11	10	-	-	-	2
South Dakota	-	-	-	-	-	-	-	26	26	37	-	-	-	-
Nebraska	1	1	-	-	-	-	-	56	56	40	-	-	-	-
Kansas	-	-	-	-	-	-	-	113	113	112	2	2	-	5
SOUTH ATLANTIC	57	57	-	-	-	-	-	3,460	3,460	2,849	69	69	136	4
Delaware*	3	3	-	-	-	-	-	57	57	63	7	7	-	-
Maryland*	4	4	-	-	-	-	-	299	299	261	2	2	10	-
District of Columbia	-	-	-	-	-	-	-	208	208	275	8	8	15	-
Virginia	7	7	-	-	-	-	-	386	386	260	11	11	50	3
West Virginia*	4	4	-	-	-	-	-	32	32	56	-	-	-	-
North Carolina	2	2	-	-	-	-	-	602	602	421	-	-	13	-
South Carolina*	19	19	-	-	-	-	-	739	739	332	14	14	12	-
Georgia	8	8	-	-	-	-	-	640	640	383	12	12	12	-
Florida*	10	10	-	-	-	-	-	497	497	798	15	15	24	1
EAST SOUTH CENTRAL	35	35	1	-	-	-	-	719	719	841	11	11	30	2
Kentucky	5	5	1	-	-	-	-	49	49	128	2	2	14	2
Tennessee	16	16	-	-	-	-	-	393	393	427	3	3	6	-
Alabama	14	14	-	-	-	-	-	102	102	139	4	4	5	-
Mississippi	-	-	-	-	-	-	-	175	175	147	2	2	5	-
WEST SOUTH CENTRAL	75	75	1	-	-	-	-	2,176	2,176	1,318	33	33	19	7
Arkansas*	5	5	-	-	-	-	-	113	113	196	-	-	1	1
Louisiana*	8	8	1	-	-	-	-	33	33	179	3	3	6	1
Oklahoma	3	3	-	-	-	-	-	118	118	134	1	1	1	1
Texas*	59	59	-	-	-	-	-	1,912	1,912	809	29	29	11	4
MOUNTAIN	15	15	-	-	-	-	-	505	505	314	5	5	10	-
Montana	-	-	-	-	-	-	-	43	43	34	-	-	-	-
Idaho	-	-	-	-	-	-	-	36	36	30	-	-	-	-
Wyoming	1	1	-	-	-	-	-	6	6	11	-	-	1	-
Colorado	-	-	-	-	-	-	-	163	163	93	-	-	5	-
New Mexico	9	9	-	-	-	-	-	37	37	-	-	-	-	-
Arizona	5	5	-	-	-	-	-	141	141	107	2	2	4	-
Utah*	-	-	-	-	-	-	-	9	9	11	-	-	-	-
Nevada	-	-	-	-	-	-	-	70	70	28	3	3	-	-
PACIFIC	63	63	-	3	3	-	-	1,978	1,978	1,422	79	79	61	6
Washington	-	-	-	-	-	-	-	177	177	190	-	-	-	-
Oregon	1	1	-	-	-	-	-	98	98	123	1	1	1	-
California	58	58	-	3	3	-	-	1,579	1,579	1,025	78	78	59	6
Alaska	-	-	-	-	-	-	-	71	71	42	-	-	-	-
Hawaii	4	4	-	-	-	-	-	53	53	42	-	-	1	-
Guam*	-	-	-	-	-	-	-	-	-	21	-	-	-	-
Puerto Rico	10	10	-	-	-	-	-	49	49	20	22	22	4	2
Virgin Islands	-	-	-	-	-	-	-	-	-	6	-	-	-	-

*Delayed reports (1973): TB: Ill. 11, Md. 10, Fla. 24, Tex. 12, Utah 2, Guam 2
 Gonorrhea: Ill. 549, Del. 30, Md. 269, La. 2, Utah 107, Guam 11
 Typhoid: S.C. delete 1, Ark. delete 1, Tex. 1
 Syphilis: Del. 1, Md. 6
 Rabies: Fla. 1, Tex. 6
 RMSF: W.Va. 1

Morbidity and Mortality Weekly Report

TABLE IV. DEATHS IN 121 UNITED STATES CITIES FOR WEEK ENDING JANUARY 5, 1974

Week No.

1

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes					Pneumonia and Influenza All Ages	Area	All Causes					Pneumonia and Influenza All Ages
	All Ages	65 years and over	45-64 years	25-44 years	Under 1 year			All Ages	65 years and over	45-64 years	25-44 years	Under 1 year	
NEW ENGLAND	760	493	193	41	11	37	SOUTH ATLANTIC	1,201	655	369	93	34	61
Boston, Mass.	205	126	52	14	5	5	Atlanta, Ga.	108	49	39	9	4	3
Bridgeport, Conn.	54	33	13	4	4	5	Baltimore, Md.	200	111	59	21	1	9
Cambridge, Mass.	32	24	6	2	—	7	Charlotte, N. C.	69	33	15	6	7	—
Fall River, Mass.	29	18	9	1	—	1	Jacksonville, Fla.	100	58	28	7	1	3
Hartford, Conn.	53	29	18	3	—	—	Miami, Fla.	122	75	34	8	2	3
Lowell, Mass.	25	19	5	1	—	1	Norfolk, Va.	58	29	21	4	3	7
Lynn, Mass.	22	20	2	—	—	—	Richmond, Va.	70	41	23	4	—	8
New Bedford, Mass.	25	14	10	1	—	1	Savannah, Ga.	36	15	14	4	2	4
New Haven, Conn.	59	35	18	4	—	1	St. Petersburg, Fla.	101	79	12	3	6	4
Providence, R. I.	72	47	19	2	2	6	Tampa, Fla.	76	46	21	3	3	9
Somerville, Mass.	10	8	2	—	—	1	Washington, D. C.	207	96	83	16	5	4
Springfield, Mass.	64	41	15	6	—	3	Wilmington, Del.	54	23	20	8	—	7
Waterbury, Conn.	36	28	6	—	—	1	EAST SOUTH CENTRAL	515	302	136	37	18	23
Worcester, Mass.	74	51	18	3	—	5	Birmingham, Ala.	46	29	12	3	—	1
MIDDLE ATLANTIC	3,175	1,949	829	203	94	123	Chattanooga, Tenn.	37	26	7	2	1	4
Albany, N. Y.	61	39	15	3	3	—	Knoxville, Tenn.	38	27	9	2	—	1
Allentown, Pa.	35	24	8	—	1	1	Louisville, Ky.	88	47	23	9	4	5
Buffalo, N. Y.	146	89	41	7	7	11	Memphis, Tenn.	112	59	30	7	8	5
Camden, N. J.	35	15	15	3	—	3	Mobile, Ala.	61	32	21	2	3	2
Elizabeth, N. J.	29	17	7	3	—	2	Montgomery, Ala.	31	20	9	1	—	1
Erie, Pa.	30	20	9	—	—	3	Nashville, Tenn.	102	62	25	11	2	4
Jersey City, N. J.	50	33	13	4	—	2	WEST SOUTH CENTRAL	1,194	676	326	88	49	41
Newark, N. J.	73	33	26	8	5	1	Austin, Tex.	31	18	7	3	—	3
New York City, N. Y.	1,625	1,022	388	115	47	65	Baton Rouge, La.	54	35	12	5	1	2
Paterson, N. J.	29	18	8	1	2	2	Corpus Christi, Tex.	37	16	16	4	1	—
Philadelphia, Pa.	409	224	123	30	15	5	Dallas, Tex.	154	85	37	14	6	2
Pittsburgh, Pa.	217	127	67	8	6	9	El Paso, Tex.	48	28	13	3	2	5
Reading, Pa.	37	28	8	1	—	—	Fort Worth, Tex.	88	52	27	2	6	1
Rochester, N. Y.	137	97	24	9	4	10	Houston, Tex.	171	81	56	15	10	4
Schenectady, N. Y.	32	23	8	—	—	—	Little Rock, Ark.	32	20	6	2	3	—
Scranton, Pa.	62	37	18	4	—	1	New Orleans, La.	271	148	87	17	9	7
Syracuse, N. Y.	69	45	19	2	3	1	San Antonio, Tex.	154	89	35	16	3	5
Trenton, N. J.	42	23	15	2	1	3	Shreveport, La.	76	48	20	2	5	5
Utica, N. Y.	19	15	2	1	—	1	Tulsa, Okla.	78	56	10	5	3	7
Yonkers, N. Y.	38	20	15	2	—	3	MOUNTAIN	635	382	157	50	22	32
EAST NORTH CENTRAL	2,577	1,495	728	172	85	79	Albuquerque, N. Mex.	62	36	11	10	1	6
Akron, Ohio	70	45	17	3	1	—	Colorado Springs, Colo.	33	24	2	2	3	7
Canton, Ohio	44	27	13	1	1	2	Denver, Colo.	164	98	49	14	—	4
Chicago, Ill.	698	372	213	55	29	18	Las Vegas, Nev.	33	17	15	1	—	1
Cincinnati, Ohio	155	94	39	11	8	2	Ogden, Utah	22	16	3	2	—	6
Cleveland, Ohio	243	144	67	14	8	4	Phoenix, Ariz.	133	73	37	9	8	3
Columbus, Ohio	135	71	43	8	7	3	Pueblo, Colo.	31	21	5	3	—	4
Dayton, Ohio	110	67	26	8	1	4	Salt Lake City, Utah	60	36	13	4	5	—
Detroit, Mich.	330	188	102	27	1	8	Tucson, Ariz.	97	61	22	5	5	1
Evansville, Ind.	48	33	12	1	1	4	PACIFIC	1,622	1,051	382	103	36	46
Fort Wayne, Ind.	52	27	15	3	2	1	Berkeley, Calif.	15	13	2	—	—	2
Gary, Ind.	50	22	16	8	2	3	Fresno, Calif.	62	36	17	6	1	1
Grand Rapids, Mich.	53	40	10	1	2	3	Glendale, Calif.	23	16	6	1	—	—
Indianapolis, Ind.	162	91	45	12	8	7	Honolulu, Hawaii	46	28	14	2	2	2
Madison, Wis.	31	15	13	1	1	6	Long Beach, Calif.	95	62	24	5	3	1
Milwaukee, Wis.	133	88	35	7	1	2	Los Angeles, Calif.	495	317	114	42	9	6
Peoria, Ill.	25	15	4	1	3	2	Oakland, Calif.	86	61	18	2	2	3
Rockford, Ill.	45	31	8	5	1	5	Pasadena, Calif.	44	36	6	—	—	1
South Bend, Ind.	40	24	14	—	—	3	Portland, Oreg.	120	75	35	4	2	2
Toledo, Ohio	95	61	23	3	6	—	Sacramento, Calif.	73	45	19	4	4	2
Youngstown, Ohio	58	40	13	3	2	2	San Diego, Calif.	109	72	18	7	2	8
WEST NORTH CENTRAL	842	557	199	37	28	28	San Francisco, Calif.	173	106	43	18	1	5
Des Moines, Iowa	44	37	7	—	—	—	San Jose, Calif.	45	30	14	1	—	—
Duluth, Minn.	29	20	8	1	—	—	Seattle, Wash.	124	79	23	8	8	7
Kansas City, Kans.	33	19	11	1	2	1	Spokane, Wash.	60	40	16	2	1	5
Kansas City, Mo.	122	80	29	8	5	1	Tacoma, Wash.	52	35	13	1	1	1
Lincoln, Nebr.	45	35	8	2	—	2	Total	12,521	7,560	3,319	824	377	470
Minneapolis, Minn.	125	83	29	3	7	5	Expected Number	13,097	7,802	3,521	824	466	506
Omaha, Nebr.	86	50	25	4	5	1							
St. Louis, Mo.	249	163	55	11	6	10							
St. Paul, Minn.	73	49	19	3	1	2							
Wichita, Kans.	36	21	8	4	2	6							

INTERNATIONAL NOTES
CHOLERA — Worldwide

After remaining relatively quiescent in 1972 and the first part of 1973, cholera again came into prominence when it invaded Italy and several imported cases occurred in 4 other European countries. It also caused concern in the drought-affected Sahelian areas of West Africa. Mozambique and Malawi, which had not previously recorded the presence of cholera in this pandemic, have reported cases in September and October.

In Asia, Sri Lanka has reported cholera for the first time since 1953. Thailand and the Khmer Republic have reported cases again after remaining free since 1969 and 1968, respectively. One indigenous case of cholera has been detected in Texas, and the source of infection is still being investigated (MMWR, Vol. 22, Nos. 35, 36, 37). The last reported case of non-laboratory associated classical cholera in the United States was in 1911.

The global cholera situation during the first 5 months of 1973 has been reported earlier (1). During that period only 6 countries in Africa and 9 in Asia were affected. By October 24, although reporting is not complete, 13 countries in Africa, 14 in Asia, and 1 in Europe have reported the disease, in addition to the 1 case in the United States and 25 imported cases in France, the Federal Republic of Germany including West Berlin, Sweden, and the United Kingdom.

In Africa, cholera was not reported to have caused a major public health problem in any of the previously infected areas, except in 4 of the 6 drought-affected Sahelian countries. Though accurate information on the magnitude of the specific problem caused by cholera in such situations is difficult to obtain, acute dehydrating diarrheas along with cholera have been noted to take a heavy toll of human lives. As far as it could be ascertained, cholera occurred in sporadic fashion over wide areas, and the incidence has apparently declined since

the end of July when the rains set in. Case fatality has been markedly reduced in certain areas where mobile teams have been used extensively. The prevailing causative agent in these countries is *Vibrio cholerae*, biotype El Tor, serotype Ogawa, but in Mozambique it is serotype Inaba.

In Asia, the cholera situation in Thailand, Indonesia, and Sabah appears to be improving. Thailand has reported the causative agent to be *V. cholerae*, biotype El Tor, serotype Ogawa, while that in the Khmer Republic appears to be serotype Inaba.

The epidemic in Italy was due to serotype Ogawa. The areas of Bari, Cagliari, Caserta, Naples, and Taranto were declared free from infection on October 12, while Lecce remains an infected area. The invasion of southern Italy by cholera resulted in 25 notified deaths. Every year in this part of the country there are some 1,200 deaths attributed to diarrhea, which represent about 40% of the national total of more than 3,000 diarrheal deaths (2).

The case in the United States and the 25 imported cases in different countries in Europe without further spread demonstrate again that cholera can be introduced to any part of the world but will generate secondary cases only in areas that are "cholera receptive" in terms of sanitation and personal and food hygiene.

(Reported by the World Health Organization: Weekly Epidemiological Record 48:413, 26 October 1973.)

References

1. World Health Organization: Weekly Epidemiological Record 48:281-282, 13 July 1973
2. *Annuario di Statistiche Sanitarie*, Vols. XIII, XIV, & XV, 1967, 1968, 1969, Istituto Centrale di Statistica (Roma, 1970, 1971, 1972) and *World Health Statistics Annual*, 1970 and 1969 (Geneva 1972, 1973)

EPIDEMIOLOGIC NOTES AND REPORTS
TOXIC PERIPHERAL POLYNEUROPATHY — Ohio

In mid-August 1973, a 43-year-old male employee of a plant producing vinyl-coated cloth presented to the neurosurgery service of the Ohio State University Hospital complaining of having been weak since May. On neurologic examination he was found to have bilateral weakness of the wrist extensors, wrist flexors, finger extensors, finger flexors, and finger abductors. He also had foot drop, absent ankle deep tendon reflexes, and atrophy of the interosseous muscles bilaterally. Electromyography confirmed the diagnosis of a relatively acute peripheral neuropathy. No etiology was determined.

The patient revealed that 5 other employees in his department at the factory (the print department) had a similar illness. Four had been hospitalized, and 1 had been treated as an outpatient. These cases were reported to the Division of Occupational Health, Ohio Department of Health.

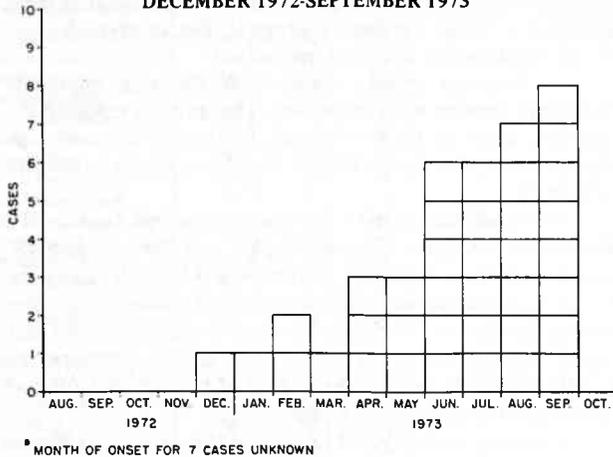
Suspecting that a toxic agent might be present in the plant, health officials performed electromyograms (EMG) on 1,156 employees. Those with abnormal EMGs were given a neurologic examination and were interviewed about previous neurologic disease. A total of 45 employees were found to have symptoms, signs, and EMGs consistent with an acute peripheral neuropathy not attributable to a known cause.

Epidemiologic investigation revealed that 35 of the 45 employees worked in the print department where a mixture of methyl ethyl ketone and methyl butyl ketone (MBK) was used in large quantities as a solvent. This material was used less frequently and in much smaller quantities in other areas of the plant. MBK was first used in August 1972 and was put into full use by December 1972. Cases began in December 1972 and are shown by dates of symptom onset in Figure 1. As no other changes in materials had occurred in the past several years, MBK was implicated as the toxic agent. Furthermore, workers in an almost identical coated fabric factory in California in which MBK was not used had no disease.

Measurements of organic solvents in the print department atmosphere revealed several instances where vapor concentrations exceeded OSHA (Occupational Safety and Health Administration) standards. Printing machine operators, who had the highest attack rate as a group, were exposed to the highest concentrations of solvent vapors. In addition, they had significant exposure through other routes. Work practices and lack of protective clothing may have resulted in excessive skin exposure. Employees eating on the job demonstrated a

PERIPHERAL POLYNEUROPATHY — Continued

Figure 1
38 PERIPHERAL NEUROPATHY CASES, BY MONTH OF ONSET*
IN OHIO FACTORY WORKERS
DECEMBER 1972-SEPTEMBER 1973



significantly greater risk of acquiring the disease than those who did not. Finally, the affected employees worked significantly more overtime than nonaffected employees.

The affected department was closed for 1 month in early September 1973. MBK was removed from production materials, improved ventilation was installed, and improved working practices were instituted.

Since the department's reopening in early October, no new cases of peripheral neuropathy have been discovered. The National Institute of Occupational Safety and Health is

investigating the use of MBK in other areas of the country. (Reported by Mary Ann Gilchrist, M.D., Neurology Resident, William E. Hunt, M.D., Director of Neurosurgery, Norman Allen, M.D., Director of Neurology, Ohio State University Hospital; H. T. Yee, M.S., Principal Engineer, Donald J. Billmaier, M.D., Medical Chief, Dorothy Benning, R.N., Acting Chief, Ohio Division of Occupational Health, John H. Ackerman, M.D., State Epidemiologist, John W. Cashman, M.D., Director, Ohio Department of Health; Albert Starr, Chief, Occupational Health Section, California State Department of Health; the Biometry Branch, Division of Field Studies and Clinical Investigations, National Institute of Occupational Safety and Health, CDC; and an EIS Officer.)

Editorial Note

Neither MBK nor any of the other agents used in the plant have previously been associated with such an illness. Despite the use of a large variety of chemical compounds making it difficult to single out MBK as the sole toxic agent, no other agent appeared responsible. Animal experiments currently in progress may confirm MBK's neurotoxicity.

Even without unequivocal identification of an agent, the outbreak illustrates the potential hazards of industrial solvents. MBK has come into widespread industrial use only in the past 2 or 3 years. As with many industrial solvents, only effects of acute exposure were investigated for the establishment of safety standards. In this outbreak, significant effects of a chronic exposure were noted from a solvent which was thought to be safe. Furthermore, workers were exposed to large amounts of MBK by inadequate ventilation and general lack of appreciation for established safety procedures for working with organic solvents. Even if another agent had been involved, the outbreak terminated with the institution of proper ventilation and safe work practices.

INFLUENZA — Sweden, United States

Sweden

The incidence of clinical influenza is reported to be relatively high throughout the country. Surveillance indices for Sweden's 3 largest cities were 25% above baseline values during the last week in December. All virological data implicate influenza B as the etiologic agent of this outbreak. There have been no virologically confirmed cases of influenza A in Sweden.

(Reported by the National Bacteriological Laboratory, Stockholm.)

United States

Influenza surveillance indices in this country remain at normal seasonal levels indicating that there is not a significant amount of influenza present at this time. The pneumonia and influenza mortality statistics for 121 U.S. cities (Figure 2) indicate that pneumonia-influenza deaths are within the expected range both regionally and nationally.

(Reported by the Viral Diseases Branch, Bureau of Epidemiology, CDC.)

TURTLE-ASSOCIATED SALMONELLOSIS — Washington

On July 26, 1973, a 4-year-old girl from Edmonds, Washington, became ill with fever, abdominal pain, and diarrhea, 1 day after arriving with a 6-year-old sibling and a cousin for a vacation visit with her grandmother. On July 30, the grandmother, who had taken care of the girl, became ill with stomach cramps, headache, fever, and diarrhea. Each of the other 2 children and the girl's father and mother remained asymptomatic. *Salmonella java* was isolated from the girl's stool.

Epidemiologic investigation by state health department officials revealed that on June 5, 1973, an aunt had purchased 2 red-eared turtles from a pet shop in the area and had given them to the patient on her birthday, June 6. These turtles were from a lot of 100 purchased on April 9 from a commer-

cial producer in Belzoni, Mississippi, and certified as "salmonella-free" by that state. Coincidentally, on June 5 the Seattle-King County Health Department had visited the pet shop, tested the turtles for salmonella, and found them positive for *S. java*. Only 4 turtles of the lot remained at the pet store, and they were destroyed.

On August 7, the patient's home was visited and 2 live turtles, the aquarium, aquarium water, turtle foods, sweepings from a vacuum cleaner, and a water sample from an outdoor swimming pool were collected for laboratory examination. *S. java* was isolated from the turtles, aquarium water, and vacuum sweepings. Specimens of turtle food and swimming pool water were negative.

(Continued on page 12)

SALMONELLOSIS - Continued

(Reported by Harley C. Wahl, M.D., Attending Physician; Claris Hyatt, M.D., Health Officer, Harold F. Luke, D.V.M., Chief, Epidemiology Unit, and Jordan Lefler, Bacteriologist,

Snohomish Health District; Ray B. Watkins, D.V.M., and Herbert W. Anderson, R.S., Division of Epidemiology, Seattle-King County Health Department; and Thieu L. Nghiem, M.D., Dr. P.H., State Epidemiologist, Washington Department of Social and Health Services, Health Services Division.)

CURRENT TRENDS

RECALL OF COMMERCIALY CANNED MUSHROOMS - United States

On January 9, 1974, the Food and Drug Administration (FDA) announced that Oxford Corporation, Oxford, Pennsylvania, was voluntarily recalling all 16-oz cans of mushrooms produced before May 10, 1972. These cans of mushrooms are usually used in institutions, restaurants, etc., not in the home. The recall was initiated after botulinal toxin was detected in a sample of the product.

Products under recall include cans of the affected labels with any single line identification code or with a 2-line code in which the top line ends in 2 and is preceded by the numbers 1 through 129. The majority of the cans recalled were packed under the Colonial Farms or Star Chef brand labels, listing the Oxford Corporation. In addition, 18 other private labels of companies that purchased mushrooms from Oxford are under recall.

On January 4, Mount Laurel Canning Corporation, Tem-

ple, Pennsylvania, had declared a similar recall of its 4-oz cans of mushrooms which were distributed under the Mount Laurel and 17 other private labels. This recall was issued after FDA detected spores with the potential for producing botulinal toxin in samples of the products.

Both recalls resulted from a nationwide warehouse inspection of all canned mushrooms conducted by FDA which began on September 25, 1973 (MMWR, Vol. 22, No. 38). No cases of botulism associated with consumption of these mushroom products have been reported to CDC. Consumers are asked to return any mushroom product believed to be included in either recall to the store where purchased. FDA has provided state health departments with a complete list of affected labels.

(Reported by the Food and Drug Administration; and the Bacterial Diseases Branch, Bureau of Epidemiology, CDC.)

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The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting outbreaks or case investigations of current interest to health officials.

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